Challenges and solutions
for data on
agricultural greenhouse gas emissions

Robert Mayo & Reuben Sessa
presented by
Mukesh Srivastava
Why is this needed?

- There is growing need for monitoring the sustainability and environmental impact of agricultural production systems.

- Life cycle analysis (LCA) of individual products is being undertaken by an ever growing number of stakeholders, especially for GHG emissions and environmental labelling.

- Emissions compilers lack data sets especially in the agriculture sector and can therefore not accurately meet their reporting requirements (next slides).

- Improved data on emissions and effectiveness of different practices in creating sinks is required to improve agriculture sectors access to mitigation financing options.

- FAOSTAT and related databases therefore need to be re-structured and additional data and datasets need to be added to meet new user requirements.
International Reporting

- IPCC Guidelines on reporting GHG emissions for UNFCCC
- IPCC Guidelines differ in their complexity
- IPCC category Agriculture, Forestry and Other Land Use (AFOLU) presents a unique challenge due to the lack of data from developing countries
- A joint FAO IPCC expert meeting was held in October 2009 to identified data that is already available for data compilers to use in the preparation of national inventories and links to access the data with relevant metadata.
Datasets, Data and knowledge gaps

- Key datasets identified – FAOSTAT, LUCAS, Forest Resource Assessment, etc;
- Key data gaps to be filled for IPCC/UNFCCC reporting;
- Key knowledge gaps to be filled (coefficients etc);
- Data structure in databases needs to change to better cater for user needs;
- Indicator gaps to be filled to better cater for user needs.
Methodological issues

- Use existing IPCC methodology were possible.
- Identify all key stakeholder requirements (present and potential future).
- Assess current national capacity to gather the new data and determine main constraints.
- Provide training and support to countries.
- Work with partners in developing the infrastructure and network for undertaking agricultural GHG assessment.
- Support LCA studies and the IPPC 5th Assessment Report.
Conclusions and next steps

- Agricultural statistics lacks key environmental data to meet the new requirements.
- FAO to develop a cooperation with partners to assist in filling key data gaps, especially related to GHG information.
- Analysis of key data set requirements is being undertaken.
- Methodologies and capacity will be developed with national entities to support the data gathering process.
- Using existing and new data a global GHG assessment will be undertaken in close collaboration with IPCC.
- It is envisaged that an assessment would be undertaken every 4 years.